## **REMARKS**

Applicants will address each of the Examiner's rejections in the order in which they appear in the Office Action.

## Claim Rejections - 35 USC §103

## Claims 1, 4-6, 7, 13-15, 19 and 20-23

In the Office Action, the Examiner rejects Claims 1, 4-6, 7, 13-15, 19 and 20-23 under 35 USC §103(a) as being unpatentable over Forrest et al. (US 5,703,436) in view of Liao et al. (US 6,717,358). This rejection is respectfully traversed.

While Applicants traverse this rejection, in order to advance the prosecution of this application, Applicants are amending each of the pending independent claims (i.e. Claims 1, 20-22) to recite the features of an anode and a cathode and that the third layer is "formed over and being in contact with the second layer," that the fourth layer is "formed over and being in contact with the third layer" and that the cathode is "formed over and being in contact with the fourth layer." These features are supported by, for example, page 5, line 27 - page 11, line 10 in the specification and Fig. 1 of the present application.

These features are not disclosed or suggested by <u>Forrest</u> and/or <u>Liao</u>. For example, alleged third layer 26 in Fig. 2C in <u>Forrest</u> (cited by the Examiner in the rejection) is not in contact with alleged second layer 21T, and alleged fourth layer 20H is not in contact with alleged third layer 26.

In addition, in <u>Forrest</u>, a cathode is not formed in contact with the alleged fourth layer. More specifically, one skilled in the art would understand that in Fig. 2C in <u>Forrest</u>, the "second electrode" 26 (i.e. top electrode 26) is an anode. This is clear since the alleged fourth layer 20H is defined in

Forrest as a HTL (hole transporting layer). Such a layer is provided in contact with an anode (i.e. top electrode 26) since HTL promotes the injection of hole from the anode.

Furthermore, one skilled in the art would not replace the "second electrode" in Forrest (top electrode 26 in Figure 2C) with the cathode in Liao (item 140 in Figure 1). As explained above, in Fig. 2C in Forrest, the "second electrode" 26 is an anode. Therefore, it is not reasonable to replace the second electrode (an anode) 26 with a cathode since such a replacement would jeopardize the function of the device of Forrest. In particular, one of ordinary skill in the art would understand that the layers interposed between the pair of electrodes in Forrest have a rectification property. This means that no current can flow if a cathode is used for the second electrode in Forrest. The replacement of the second electrode 26 with a cathode also simultaneously requires the replacement of the HTL with an electron transporting layer. As stated in MPEP §2143.01, "[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)." Hence, such a modification is improper.

Therefore, independent Claims 1 and 20-22 are not disclosed or suggested by the cited references, and Claims 1, 20-22 and those claims dependent thereon are patentable over the cited references. Accordingly, it is respectfully requested that this rejection be withdrawn.

## Claims 16-18 and 24-26

The Examiner also rejects Claims 16-18 and 24-26 under 35 U.S.C. §103(a) as being unpatentable over Forrest and Liao in view of Kido et al. (US 2003/0189401). This rejection is also respectfully traversed.

These claims are dependent claims. Therefore, for at least the reasons discussed above for

the independent claims, these claims are also patentable over the cited references. Accordingly, it is

respectfully requested that this rejection be withdrawn.

Double Patenting

The Examiner also rejects Claims 1, 4-7, 13-17, 18-19 and 20-26 provisionally on the

grounds of non statutory obviousness-type double patenting as being unpatentable over Claims 15-31

of copendng application no. 10/575,202 (or US 2007/0090376). This rejection is also respectfully

traversed.

While Applicants traverse this rejection, it is respectfully requested that this rejection be held

in abevance until the prior art rejections are overcome and the claims are in their final form.

Conclusion

It is respectfully submitted that the present application is in a condition for allowance and

should be allowed.

If any fee should be due for this amendment, please charge our deposit account 50/1039.

Favorable reconsideration is earnestly solicited.

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Respectfully submitted,

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